

CLAIMS

1. A method of screening for breast cancer, comprising:
testing a plurality of asymptomatic women by measuring at least one electrical
5 impedance characteristic on at least one breast, said asymptomatic woman being classified as
belonging to a first group having a first risk factor for breast cancer; and
re-classifying some of the women as belonging to a second group having a second risk
factor greater than the first risk factor, based on the at least one impedance characteristic,
wherein the second group has a risk factor of at least twice that of the first group, but
10 less than 15 times that of the first group; and
wherein fewer than 50% of those in the first group that have breast cancer are
reclassified into the second group.
2. A method according to claim 1, wherein the second group has a risk factor at least 5
15 times as high as that of the first group.
3. A method according to claim 1, wherein the second group has a risk factor at least 10
times as high as that of the first group.
- 20 4. A method according to any of claims 1-3 wherein the first group consists of a general
population of women between 15 and 40 years old.
5. A method according to claim 4 wherein the first group consists of a general population
of women between 20 and 35 years old.
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6. A method according to any of claims 1-3 wherein more than 20% percent of women
having cancer in the first group are re-classified in said second group.
7. A method according to claim 6 wherein more than 25% percent of women having
30 cancer in the first group are re-classified in said second group.
8. A method according to claim 6 wherein more than 30% percent of women having
cancer in the first group are re-classified in said second group.

9. A method according to claim 6, wherein fewer than 40% of women having cancer in the first group are re-classified in said second group.
10. A method according to claim 7, wherein fewer than 40% of women having cancer in the first group are re-classified in said second group.
11. A method according to claim 8, wherein fewer than 40% of women having cancer in the first group are re-classified in said second group.
12. A method according to claim 1, wherein up to 10% of the women in the first group not having cancer are placed in the second group.
13. A method according to any of claims 1-3 wherein between 5% and 10% of the woman in the first group, not having cancer are placed in the second group.
14. Apparatus for breast cancer screening, comprising:
 - a probe for acquiring electrical signals from a breast of a patient, belonging to a low risk group for breast cancer, having a first risk factor for having breast cancer; and
 - a processor adapted to determine at least one dielectric parameter value responsive to signals acquired by the probe and to classify the patient as to whether she belongs to a high risk group, having a second risk factor of having breast cancer greater than the first risk factor, based on the at least one dielectric parameter,
 - wherein the processor is calibrated to classify less than 50% of women having cancer detectable by mammography in the low risk group as belonging to the high risk group and wherein the high risk group has a risk factor of at least twice that of the low risk group, but less than 15 times that of the low risk group.
15. Apparatus according to claim 14, wherein the processor is calibrated to classify less than 45% of women having cancer detectable by mammography in the low risk group as belonging to the high risk group.
16. Apparatus according to claim 14, wherein the processor is calibrated to classify less than 40% of women having cancer detectable by mammography in the low risk group as belonging to the high risk group.

17. Apparatus according to claim 14, wherein the processor is calibrated to classify less than 35% of women having cancer detectable by mammography in the low risk group as belonging to the high risk group.

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18. Apparatus according to claim 14, wherein the processor is calibrated to classify less than 10% of the women in the low risk group as belonging to the high risk group.

19. A method of screening for breast cancer, comprising:

10 testing a plurality of asymptomatic women by measuring at least one electrical impedance characteristic on at least one breast, said asymptomatic woman being classified as belonging to a first group having a first risk factor for breast cancer; and

re-classifying some of the women as belonging to a second group having a second risk factor greater than the first risk factor, based on the at least one impedance characteristic,

15 wherein fewer than 10% of the women in the first group are reclassified into the second group.

20. A method according to claim 19, wherein fewer than 50% of the women in the first group that have cancer are reclassified into the second group.